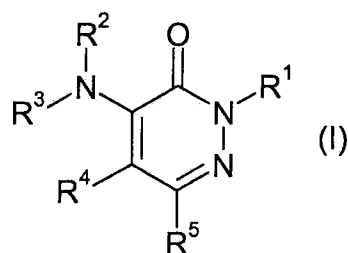


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application. Please amend claims 28 and 31. Please also cancel claim 29. Deletions appear in ~~striketrough~~, and additions are underlined.

1. (Previously Presented) A pyridazinone derivative of formula (I)



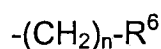
wherein

R¹ represents:

- a hydrogen atom;
- a group chosen from acyl, alkoxycarbonyl, carbamoyl, monoalkylcarbamoyl and dialkylcarbamoyl;
- an alkyl, alkenyl or alkynyl group, wherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl and mono- and di-alkylcarbamoyl groups;
- an aryl or heteroaryl group, wherein the aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, amino, nitro, cyano, mono- and di-alkylamino,

acylamino, carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups;

- a saturated or unsaturated heterocyclic group, wherein the saturated or unsaturated heterocyclic group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, oxo, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups; or
- a group of formula



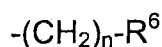
wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio, amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups;
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano and trifluoromethyl groups;

R² represents:

- a hydrogen atom;

- a group chosen from acyl, alkoxycarbonyl, carbamoyl, monoalkylcarbamoyl and dialkylcarbamoyl;
- an alkyl, alkenyl or alkynyl group, wherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, hydroxycarbonyl, alkoxycarbonyl, aryloxy, alkylthio, arylthio, oxo, amino, mono- and di-alkylamino, acylamino, carbamoyl, and mono- and di-alkylcarbamoyl groups;
- an aryl or heteroaryl group, wherein the aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups;
- a saturated or unsaturated heterocyclic group, wherein the saturated or unsaturated heterocyclic group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, oxo, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy and trifluoromethoxy groups; or
- a group of formula



wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents chosen from halogen atoms and alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio, amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-

alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups;

- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylendioxy, amino, mono- and di-alkylamino, nitro, cyano, and trifluoromethyl groups;

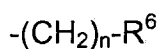
R³ represents a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one or more substituents chosen from:

- halogen atoms;
- alkyl and alkylene groups, wherein the alkyl and alkylene groups are optionally substituted by one or more substituents chosen from halogen atoms, phenyl, hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups; and
- phenyl, hydroxy, hydroxyalkyl, alkoxy, cycloalkoxy, nitro, cyano, aryloxy, alkylthio, arylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfamoyl, acyl, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulfamido, aminosulfonyl, mono- and di-alkylaminosulfonyl, difluoromethoxy, and trifluoromethoxy groups;

R⁴ represents:

- a hydrogen atom;
- a hydroxy, alkoxy, amino, monoalkylamino, dialkylamino or cyano group;

- an alkyl, alkenyl or alkynyl group, wherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, acyloxy, alkoxy, aryloxy, alkylthio, arylthio, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, alkoxyimino, carbamoyl, and mono- and di-alkylcarbamoyl groups;
- or a group of formula



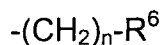
wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio, amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups;
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, phenyl, alkoxyphenyl, halophenyl, pyridyl, alkoxycarbonyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano, and trifluoromethyl groups;

R⁵ represents a group $-\text{COOR}^7$ or a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one or more substituents chosen from:

- halogen atoms;

- alkyl and alkenyl groups, wherein the alkyl and alkenyl groups are optionally substituted by one or more substituents chosen from halogen atoms, phenyl, hydroxy, hydroxyalkyl, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl groups; and
- phenyl, hydroxy, alkylenedioxy, alkoxy, cycloalkyloxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfamoyl, amino, mono- and di-alkylamino, acylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulfamido, aminosulfonyl, mono- and di-alkylaminosulfonyl, cyano, difluoromethoxy, and trifluoromethoxy groups;
- wherein R⁷ represents
 - an alkyl, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups,
 - or a group of formula



wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio, amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, cyano,

trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups;

- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, phenyl, alkoxyphenyl, halophenyl, pyridyl, alkoxy carbonyl, hydroxy, alkoxy, alkylendioxy, amino, mono- and di-alkylamino, nitro, cyano, and trifluoromethyl groups;

or a salt thereof, or a N-oxide thereof;

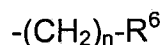
with the proviso that when R^1 is methyl, R^2 is H, and both R^3 and R^5 are phenyl then R^4 is not a 1-hydroxyethyl group.

2. (Previously Presented) A compound according to claim 1, wherein R^1 is chosen from hydrogen atoms and alkyl groups, wherein the alkyl groups are optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, alkylthio, hydroxycarbonyl and alkoxy carbonyl groups
3. (Previously Presented) A compound according to claim 2 wherein R^1 is chosen from unsubstituted C_{1-4} alkyl groups.
4. (Previously Presented) A compound according to claim 1, wherein R^2 is chosen from:
 - hydrogen atoms,
 - an acyl group,
 - an alkyl group, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, and alkylthio groups; and

- aryl and heteroaryl groups, wherein the aryl and heteroaryl groups are optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, hydroxycarbonyl, alkoxy, alkylenedioxy, alkoxycarbonyl, aryloxy, acyl, acyloxy, alkylthio, arylthio, amino, nitro, cyano, mono- and di-alkylamino, acylamino, carbamoyl, mono- and di-alkylcarbamoyl, difluoromethyl, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups.
5. (Original) A compound according to claim 4 wherein R² is a hydrogen atom.
6. (Previously Presented) A compound according to claim 1, wherein R³ represents a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, wherein the monocyclic or polycyclic, aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one or more substituents chosen from:
- halogen atoms;
 - alkyl and alkylene groups, wherein the alkyl and alkylene groups are optionally substituted by one or more substituents chosen from halogen atoms, phenyl, hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- or di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl and mono- and di-alkylcarbamoyl groups; and
 - phenyl, hydroxy, hydroxyalkyl, alkoxycarbonyl, alkoxy, cycloalkoxy, nitro, cyano, aryloxy, alkylthio, arylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfamoyl, acyl, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulfamido, aminosulfonyl, mono- and di-alkylaminosulfonyl, difluoromethoxy, and trifluoromethoxy groups.
7. (Previously Presented) A compound according to claim 6, wherein R³ represents a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group,

wherein the monocyclic or polycyclic, aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one substituent chosen from halogen atoms, alkyl groups and hydroxycarbonyl groups.

8. (Previously Presented) A compound according to claim 7, wherein R³ represents a phenyl group or a monocyclic or polycyclic N-containing heteroaryl group, wherein the phenyl group or the monocyclic or polycyclic N-containing heteroaryl group may be substituted by one substituent chosen from halogen atoms, alkyl groups and hydroxycarbonyl groups.
9. (Previously Presented) A compound according to claim 1, wherein R⁴ represents:
- a hydrogen atom;
 - a cyano group;
 - an alkyl, alkenyl or alkynyl group, wherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, acyloxy, alkoxy, aryloxy, alkylthio, arylthio, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups;
 - or a group of formula

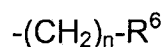


wherein n is an integer from 0 to 4 and R⁶ represents a 3- to 7-membered ring comprising from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, phenyl, alkoxyphenyl, halophenyl, pyridyl, alkoxycarbonyl, hydroxy, alkoxy, alkylendioxy, amino, mono- and di-alkylamino, nitro, cyano, and trifluoromethyl groups.

10. (Original) A compound according to claim 9 wherein R⁴ represents a hydrogen atom or a cyano group.
11. (Previously Presented) A compound according to claim 1, wherein R⁵ represents a group –COOR⁷, a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one or more substituents chosen from:
- halogen atoms;
 - alkyl groups, which are optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, hydroxyalkyl, alkoxy, alkylthio, mono- or di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups; and
 - hydroxy, alkylenedioxy, alkoxy, cycloalkyloxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfamoyl, amino, mono- and di-alkylamino, acylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, ureido, N'-alkylureido, N',N'-dialkylureido, alkylsulfamido, aminosulfonyl, mono- and di-alkylaminosulfonyl, cyano, difluoromethoxy, and trifluoromethoxy groups;

wherein R⁷ represents

- an alkyl group, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, aryloxy, alkylthio, arylthio, oxo, amino, mono- and di-alkylamino, acylamino, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, and mono- and di-alkylcarbamoyl groups
- or a group of formula



wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio, amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy, and trifluoromethoxy groups;
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, phenyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano, and trifluoromethyl groups;

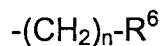
12. (Previously Presented) A compound according to claim 11, wherein R⁵ represents a monocyclic aryl or heteroaryl group, wherein the monocyclic aryl or heteroaryl group is optionally substituted by one or more substituents chosen from halogen atoms and alkyl groups.

13. (Previously Presented) A compound according to claim 1, wherein R¹ is chosen from hydrogen atoms and alkyl groups, which are optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy, alkylthio, arylthio, hydroxycarbonyl and alkoxycarbonyl groups; and R² is chosen from:

- hydrogen atoms,
- an acyl group
- an alkyl group, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxy, alkoxy and alkylthio groups; and

- aryl and heteroaryl groups, wherein the aryl and heteroaryl groups are optionally substituted by one or more halogen atoms.
14. (Previously Presented) A compound according to claim 13, wherein R¹ is chosen from unsubstituted C₁₋₄ alkyl groups and R² is a hydrogen atom.
15. (Previously Presented) A compound according to claim 14, wherein R³ represents a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one or more substituents chosen from:
- halogen atoms;
 - alkyl groups, which are optionally substituted by one or more substituents chosen from halogen atoms and hydroxy groups; and
 - cyano, and hydroxycarbonyl groups.
16. (Previously Presented) A compound according to claim 15, wherein R³ represents a phenyl group or a monocyclic or polycyclic N-containing heteroaryl group, wherein the phenyl group or the monocyclic or polycyclic N-containing heteroaryl group may be substituted by one substituent chosen from halogen atoms, alkyl groups and hydroxycarbonyl groups.
17. (Previously Presented) A compound according to claim 13, wherein R⁴ represents:
- a hydrogen atom;
 - a cyano group;
 - an alkyl, alkenyl or alkynyl group, wherein the alkyl, alkenyl or alkynyl group is optionally substituted by one or more substituents chosen from halogen atoms, hydroxyl and alkoxy groups;

- or a group of formula

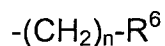


wherein n is 0 and R⁶ represents a 3- to 7-membered ring comprising from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl and phenyl groups.

18. (Original) A compound according to claim 17 wherein R⁴ represents a hydrogen atom or a cyano group.
19. (Previously Presented) A compound according to claim 13, wherein R⁵ represents a group –COOR⁷, a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one or more substituents chosen from:
- halogen atoms;
 - alkyl groups, which are optionally substituted by one or more substituents chosen from halogen atoms, hydroxyl and alkoxy groups; and
 - alkoxy, alkoxycarbonyl and hydroxycarbonyl groups;

wherein R⁷ represents

- an alkyl group, which is optionally substituted by one or more substituents chosen from halogen atoms, hydroxyl and alkoxy groups
- or a group of formula



wherein n is an integer from 0 to 4 and R⁶ represents:

- a cycloalkyl or cycloalkenyl group;
- an aryl group, which is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, hydroxy, alkoxy, alkylenedioxy, alkylthio, amino, mono- and di-alkylamino, nitro, acyl, hydroxycarbonyl, alkoxycarbonyl, carbamoyl, mono- and di-alkylcarbamoyl, cyano, trifluoromethyl, difluoromethoxy and trifluoromethoxy groups;
- or a 3- to 7-membered ring comprising from 1 to 4 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one or more substituents chosen from halogen atoms, alkyl, phenyl, hydroxy, alkoxy, alkylenedioxy, amino, mono- and di-alkylamino, nitro, cyano and trifluoromethyl groups.

20. (Previously Presented) A compound according to claim 19, wherein R⁵ represents a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one or more substituents chosen from:
- halogen atoms;
 - alkyl groups, which are optionally substituted by one or more substituents chosen from halogen atoms, hydroxyl and alkoxy groups; and
 - alkoxy groups.
21. (Previously Presented) A compound according to claim 20, wherein R⁵ represents a monocyclic aryl or heteroaryl group, which is optionally substituted by one or more substituents chosen from halogen atoms and alkyl groups.
22. (Previously Presented) A compound according to claim 1, wherein R¹ represents an alkyl group, R² represents a hydrogen atom or a group chosen from acyl, alkyl, aryl and heteroaryl groups, wherein the acyl, alkyl, aryl and heteroaryl groups are optionally substituted by one or more halogen atoms, R³

represents a monocyclic or polycyclic aryl or a monocyclic or polycyclic heteroaryl group, wherein the monocyclic or polycyclic aryl or the monocyclic or polycyclic heteroaryl group are optionally substituted by one or more substituents chosen from halogen atoms, cyano, hydroxycarbonyl and alkyl groups, which are optionally substituted by one or more hydroxy groups, R^4 represents a hydrogen atom, a cyano group, an alkyl or alkenyl group, wherein the alkyl or alkenyl groups are optionally substituted by one substituent chosen from hydroxyl and alkoxy groups or R^4 represents a group of formula $(-R^6)$ wherein R^6 represents a 4- to 6-membered ring comprising from 1 to 3 heteroatoms chosen from nitrogen, oxygen and sulphur, which ring is optionally substituted by one substituent chosen from alkyl and phenyl groups and R^5 represents a monocyclic aryl or monocyclic heteroaryl group, wherein the monocyclic aryl or the monocyclic heteroaryl group are optionally substituted by one substituent chosen from halogen atoms, alkyl and alkoxy groups.

23. (Previously Presented) A compound according to claim 1, wherein R^1 is chosen from unsubstituted C_{1-4} alkyl groups; R^2 is a hydrogen atom; R^3 represents a phenyl group or a monocyclic or polycyclic N-containing heteroaryl group, wherein the phenyl group or the monocyclic or polycyclic N-containing heteroaryl group may be substituted by one substituent chosen from halogen atoms, alkyl groups and hydroxycarbonyl groups; R^4 represents a hydrogen atom or a cyano group and R^5 represents a monocyclic aryl or monocyclic heteroaryl group, wherein the monocyclic aryl or the monocyclic heteroaryl group are optionally substituted by one or more substituents chosen from halogen atoms and alkyl groups.
24. (Previously Presented) A compound according to claim 1, chosen from:
- 4-[(3-chlorophenyl)amino]-2-ethyl-5-(1-hydroxyethyl)-6-phenylpyridazin-3(2H)-one

4-[(3-chlorophenyl)amino]-2-ethyl-5-(1-methoxyethyl)-6-phenylpyridazin-3(2H)-one

4-[(3-chlorophenyl)amino]-2-ethyl-6-phenyl-5-vinylpyridazin-3(2H)-one

4-anilino-2,5-diethyl-6-phenylpyridazin-3(2H)-one

5-[(3-chlorophenyl)amino]-1-ethyl-6-oxo-3-phenyl-1,6-dihydropyridazine-4-carbaldehyde O-methyloxime

5-[(3-chlorophenyl)amino]-1-ethyl-6-oxo-3-phenyl-1,6-dihydropyridazine-4-carbonitrile

1-ethyl-5-{[4-(hydroxymethyl)phenyl]amino}-6-oxo-3-phenyl-1,6-dihydropyridazine-4-carbonitrile

1-ethyl-6-oxo-3-phenyl-5-[(3,4,5-trifluorophenyl)amino]-1,6-dihydropyridazine-4-carbonitrile

5-[(4-cyanophenyl)amino]-1-ethyl-6-oxo-3-phenyl-1,6-dihydropyridazine-4-carbonitrile

1-ethyl-3-(4-fluorophenyl)-5-{[4-(hydroxymethyl)phenyl]amino}-6-oxo-1,6-dihydropyridazine-4-carbonitrile

5-[(4-cyanophenyl)amino]-1-ethyl-3-(4-fluorophenyl)-6-oxo-1,6-dihydropyridazine-4-carbonitrile

1-ethyl-3-(4-fluorophenyl)-6-oxo-5-[(3,4,5-trifluorophenyl)amino]-1,6-dihydropyridazine-4-carbonitrile

1-ethyl-3-(4-fluorophenyl)-6-oxo-5-(pyridin-3-ylamino)-1,6-dihydropyridazine-4-carbonitrile

1-ethyl-3-(3-fluorophenyl)-5-{[4-(hydroxymethyl)phenyl]amino}-6-oxo-1,6-dihydropyridazine-4-carbonitrile

5-[(4-cyanophenyl)amino]-1-ethyl-3-(3-fluorophenyl)-6-oxo-1,6-dihydropyridazine-4-carbonitrile

1-ethyl-3-(3-fluorophenyl)-6-oxo-5-[(3,4,5-trifluorophenyl)amino]-1,6-dihydropyridazine-4-carbonitrile

4-[(3-chlorophenyl)amino]-2-ethyl-5-(2-methyl-1,3-thiazol-4-yl)-6-phenylpyridazin-3(2H)-one

4-[(3-chlorophenyl)amino]-2-ethyl-6-phenyl-5-(2-phenyl-1,3-thiazol-4-yl)pyridazin-3(2H)-one
4-[(3-chlorophenyl)amino]-2-ethyl-5-(1-methyl-1H-pyrazol-5-yl)-6-phenylpyridazin-3(2H)-one
4-[[2-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl]amino]benzonitrile
2-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-6-phenyl-4-[(3,4,5-trifluorophenyl)amino]pyridazin-3(2H)-one
4-[(3-chlorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one
2-ethyl-4-[(3-fluorophenyl)amino]-6-phenylpyridazin-3(2H)-one
2-ethyl-4-(1-naphthylamino)-6-phenylpyridazin-3(2H)-one
2-ethyl-6-phenyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-ethyl-6-phenyl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
4-(diquinolin-5-ylamino)-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[bis(3,4,5-trifluorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[bis(3,4-difluorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[(3,4-difluorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[(3-chloro-4-fluorophenyl)amino]-2-ethyl-6-phenylpyridazin-3(2H)-one
4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]benzonitrile
2-ethyl-4-[(1-oxidopyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one
2-ethyl-6-pyridin-3-yl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-ethyl-4-[(1-oxidoquinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one
2-ethyl-6-pyridin-4-yl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-ethyl-4-(isoquinolin-4-ylamino)-6-phenylpyridazin-3(2H)-one
2-ethyl-6-phenyl-4-[(3,4,5-trifluorophenyl)amino]pyridazin-3(2H)-one
2-ethyl-4-[(4-fluorophenyl)amino]-6-phenylpyridazin-3(2H)-one
2-ethyl-6-pyridin-3-yl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-methyl-6-pyridin-3-yl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-ethyl-6-pyridin-4-yl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-ethyl-4-[[4-(hydroxymethyl)phenyl]amino]-6-phenylpyridazin-3(2H)-one

4-[(2-methyl-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile
4-[(2-ethyl-3-oxo-6-pyridin-3-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile
methyl 4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]benzoate
4-[[2-ethyl-6-(1-oxidopyridin-3-yl)-3-oxo-2,3-dihydropyridazin-4-yl]amino]benzonitrile
2-ethyl-4-(isoquinolin-4-ylamino)-6-pyridin-3-ylpyridazin-3(2H)-one
2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-pyridin-3-ylpyridazin-3(2H)-one
2-ethyl-4-(isoquinolin-4-ylamino)-6-pyridin-4-ylpyridazin-3(2H)-one
4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]benzoic acid
2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-pyridin-4-ylpyridazin-3(2H)-one
4-[(2-ethyl-3-oxo-6-pyridin-4-yl-2,3-dihydropyridazin-4-yl)amino]benzonitrile
4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)(methyl)amino]benzonitrile
N-(4-cyanophenyl)-N-(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)acetamide
6-(3-chlorophenyl)-2-ethyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-ethyl-4-[methyl(quinolin-5-yl)amino]-6-phenylpyridazin-3(2H)-one
6-(3-chlorophenyl)-2-ethyl-4-(isoquinolin-4-ylamino)pyridazin-3(2H)-one
N-(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)-N-quinolin-5-yl acetamide
2-Ethyl-4-(4-hydroxymethyl-phenylamino)-6-pyridin-3-ylpyridazin-3(2H)-one
2-ethyl-4-(isoquinolin-4-ylamino)-6-(4-methoxyphenyl)pyridazin-3(2H)-one
2-ethyl-6-(4-methoxyphenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
4-anilino-2-ethyl-6-phenylpyridazin-3(2H)-one
2-ethyl-6-(4-methylphenyl)-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-ethyl-6-(4-methylphenyl)-4-[(1-oxidoquinolin-5-yl)amino]pyridazin-3(2H)-one
2-Ethyl-6-phenyl-4-(thieno[2,3-c]pyridin-3-ylamino)pyridazin-3(2H)-one
1-Ethyl-6-oxo-3-phenyl-5-(pyridin-3-ylamino)-1,6-dihydropyridazine-4-carbonitrile
1-Ethyl-3-(3-methylphenyl)-6-oxo-5-(pyridin-3-ylamino)-1,6-dihydropyridazine-4-carbonitrile
2-Ethyl-5-(1-hydroxyethyl)-6-phenyl-4-(quinolin-5-ylamino)pyridazin-3(2H)-one
2-Ethyl-6-(4-methylphenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one

2-Ethyl-4-(isoquinolin-4-ylamino)-6-(4-methylphenyl)pyridazin-3(2H)-one
2-Ethyl-6-(4-methylphenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one
2-Ethyl-6-(3-methylphenyl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-Ethyl-4-(isoquinolin-4-ylamino)-6-(3-methylphenyl)pyridazin-3(2H)-one
2-Ethyl-6-(3-methylphenyl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one
4-[[2-Ethyl-6-(3-methylphenyl)-3-oxo-2,3-dihydropyridazin-4-yl]amino]benzoic acid
2-Ethyl-6-(5-methylpyridin-3-yl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-Ethyl-4-(isoquinolin-4-ylamino)-6-(5-methylpyridin-3-yl)pyridazin-3(2H)-one
2-Ethyl-6-(5-methylpyridin-3-yl)-4-[(4-methylpyridin-3-yl)amino]pyridazin-3(2H)-one
2-Ethyl-4-(1,7-naphthyridin-5-ylamino)-6-phenylpyridazin-3(2H)-one
[1-Ethyl-6-oxo-3-phenyl-5-(pyridin-3-ylamino)-1,6-dihydropyridazin-4-yl]methyl acetate
[1-Ethyl-6-oxo-3-phenyl-5-(pyridin-3-ylamino)-1,6-dihydropyridazin-4-yl]methyl butyrate
2-Ethyl-5-[2-(4-methoxyphenyl)-1,3-thiazol-4-yl]-6-phenyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-Ethyl-4-(isoquinolin-4-ylamino)-6-(6-methylpyridin-3-yl)pyridazin-3(2H)-one
2-Ethyl-6-(6-methylpyridin-3-yl)-4-(pyridin-3-ylamino)pyridazin-3(2H)-one
2-Ethyl-5-[2-(4-methoxyphenyl)-1,3-thiazol-4-yl]-4-[(4-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one
2-Ethyl-6-phenyl-4-(pyridin-3-ylamino)-5-(2-pyridin-4-yl-1,3-thiazol-4-yl)pyridazin-3(2H)-one
Ethyl 4-[1-ethyl-6-oxo-3-phenyl-5-(pyridin-3-ylamino)-1,6-dihydropyridazin-4-yl]-1,3-thiazole-2-carboxylate
2-Ethyl-4-(isoquinolin-4-ylamino)-5-[2-(4-methoxyphenyl)-1,3-thiazol-4-yl]-6-phenylpyridazin-3(2H)-one
2-Ethyl-4-[(4-methylpyridin-3-yl)amino]-6-phenyl-5-(2-pyridin-4-yl-1,3-thiazol-4-yl)pyridazin-3(2H)-one

5-[2-(4-Chlorophenyl)-1,3-thiazol-4-yl]-2-ethyl-4-[(4-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one

5-[2-(4-Chlorophenyl)-1,3-thiazol-4-yl]-2-ethyl-6-phenyl-4-(pyridin-3-ylamino)pyridazin-3(2H)-one

5-[2-(4-Chlorophenyl)-1,3-thiazol-4-yl]-2-ethyl-4-(isoquinolin-4-ylamino)-6-phenylpyridazin-3(2H)-one

2-Ethyl-4-[(4-methylpyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one

2-Ethyl-4-[(4-methyl-1-oxidopyridin-3-yl)amino]-6-phenylpyridazin-3(2H)-one

Ethyl 4-[(2-ethyl-3-oxo-6-phenyl-2,3-dihydropyridazin-4-yl)amino]benzoate.

or a pharmaceutically acceptable salt thereof.

25. (Previously Presented) A pharmaceutical composition, comprising a compound according to claim 1 and a pharmaceutically acceptable diluent or carrier.
26. (Cancelled)
27. (Cancelled)
28. (Currently Amended) A method for treating a subject afflicted with a pathological condition or disease susceptible to amelioration by inhibition of phosphodiesterase 4, comprising administering to said subject an effective amount of a compound according to claim 1, wherein the pathological condition or disease is chosen from asthma, atopic dermatitis and psoriasis.
29. (Cancelled)
30. (Previously Presented) A combination product comprising:
 - (i) a compound according to claim 1; and

- (ii) another compound chosen from (a) steroids, (b) immunosuppressive agents, (c) T-cell receptor blockers and (d) antiinflammatory drugs.

31. (Currently Amended) A method for treating a subject afflicted with a pathological condition or disease susceptible to amelioration by inhibition of phosphodiesterase 4, comprising administering to said subject an effective amount of a compound according to claim 1, and further comprising the simultaneous, separate or sequential administration to said subject of another compound chosen from (a) steroids, (b) immunosuppressive agents, (c) T-cell receptor blockers and (d) antiinflammatory drugs, wherein the pathological condition or disease is chosen from asthma, atopic dermatitis and psoriasis.